Applicant: Thane M. Larson et al.

Serial No.: 09/924,163 Filed: August 7, 2001 Docket No.: 10012383-1

Title: DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY

## IN THE CLAIMS

1.(Previously Amended) A server system comprising:

a plurality of printed circuit assemblies including a plurality of host processor cards;

a management card coupled to the plurality of printed circuit assemblies, the management card dedicated to monitoring and managing operation of the server system, including monitoring and managing on-line insertion and removal of the printed circuit assemblies; and

wherein the management card includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network.

2.(Previously Amended) The server system of claim 1, wherein the management card includes a management processor, and wherein the LAN switch is coupled to management connections of the plurality of host processor cards, and management connections of the management processor.

3.(Original) The server system of claim 1, and further comprising a backplane for connecting the plurality of printed circuit assemblies to the management card.

4.(Previously Presented) The server system of claim 3, wherein the plurality of host processor cards is configured to communicate status information to the management card via at least one I<sup>2</sup>C bus routed through the backplane.

5.(Original) The server system of claim 1, and further comprising:

at least one cooling fan;

at least one temperature sensor; and

the management card configured to adjust the speed of the at least one cooling fan based on temperature data provided by the at least one temperature sensor.

Applicant: Thane M. Larson et al.

Serial No.: 09/924,163 Filed: August 7, 2001 Docket No.: 10012383-1

Title: DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY

6.(Original) The server system of claim 1, wherein the management card further comprises:

a plurality of LEDs for providing server status information.

7.(Original) The server system of claim 1, wherein the management card further comprises:

a plurality of serial ports for communicating with the management card.

8.(Previously Amended) A method of managing a server system comprising:

providing a plurality of host processor cards for running customer operating systems and applications;

providing a dedicated management card that does not run customer operating systems and applications, the dedicated management card coupled to the plurality of host processor cards via a LAN switch on the management card;

monitoring and managing operation of the plurality of host processor cards with the dedicated management card, including monitoring and managing hot swapping of the host processor cards; and

communicating with an external management network via the LAN switch.

9.(Original) The method of claim 8, and further comprising:

monitoring management LAN communications of the plurality of host processor cards with the management card.

10.(Original) The method of claim 8, and further comprising:

transmitting status information from the plurality of host processor cards to the management card via at least one  $I^2C$  bus.

11.(Original) The method of claim 8, and further comprising:

monitoring the temperature of the server system with the management card; and

Applicant: Thane M. Larson et al.

Serial No.: 09/924,163 Filed: August 7, 2001 Docket No.: 10012383-1

Title: DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY

adjusting the speed of at least one cooling fan with the management card based on temperature data.

12.(Original) The method of claim 8, and further comprising:
providing status information on the management card via a plurality of LEDs.

13.(Original) The method of claim 8, and further comprising:

communicating with the management card via at least one of a plurality of serial ports on the management card.

14.(Previously Amended) A management-dedicated server management card for a server system having a plurality of removable cards, the server management card comprising:

a memory for storing server management software;

a controller coupled to the plurality of removable cards for monitoring and managing operation of the server system based on the server management software, the controller providing hot-swap functionality for the plurality of removable cards; and

a multiple-port LAN switch having at least four ports, the LAN switch coupled to the controller and configured to be coupled to a management connection of at least one of the plurality of removable cards.

15.(Previously Presented) The server management card of claim 14, wherein the LAN switch is coupled to the management connections of a plurality of the removable cards for monitoring management LAN communications.

16.(Original) The server management card of claim 14, and further comprising:

at least one  $I^2C$  bus link coupled to the controller for receiving status information from the plurality of removable cards.

17.(Original) The server management card of claim 14, and further comprising:

Applicant: Thane M. Larson et al.

Serial No.: 09/924,163 Filed: August 7, 2001 Docket No.: 10012383-1

Title: DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY

an input for receiving server temperature information, the controller configured to adjust the speed of at least one server cooling fan based on received server temperature information.

- 18.(Original) The server management card of claim 14, and further comprising: a plurality of LEDs for providing server status information.
- 19.(Original) The server management card of claim 14, and further comprising:
  a plurality of serial ports for transmitting and receiving serial communications.
- 20.(Previously Presented) The server management card of claim 14, wherein the LAN switch is configured to communicate with an external management LAN.